

The Examiner indicated in the above-identified Official Action that certain features of the present invention are unclear to him referring to various claims and the language contained therein. The Examiner stated "*It appears that Applicants have not addressed the 112, 2<sup>nd</sup> paragraph rejections of claims 26-4, 47-49 and 52-58*"

Applicants do not understand what the Examiner is referring to with respect to the reference to "26-4." In the Official Action referred to above, the Examiner only cited Claim 26 by itself. Applicants will answer this item herein restricting the response solely to Claim 26. If the Examiner has some other issue(s) in mind, Applicants' attorney will cooperate by responding promptly if the Examiner will state what, in his opinion, needs clarification.

With respect to the specific claims cited in the Official Action, Applicants' responses are presented *seriatem* after presentation of the Examiner's rejections.

**"In Claim 26 it is unclear what 'means for retractable holding said substrate', 'means for retractable moving said structure of Claim 1 toward and away from said electronic device' and 'means for applying electrical signal...' represent. Are they shown in any of the drawings?"**

Answer: In Claim 26, the elements of holding said substrate means for retractable moving of said structure of Claim 1 toward and away from said electronic device and means for applying the electronic signal applied through the substrate are depicted in Figure 1 wherein the electrical signal is supplied through substrate 11 through pad 13 in contact with a ball which is connected to wire 15 to second end 16 ball contact. Ball contact 16 contacts the electronic device 30.

**"In claims 47-48, 'said sheet' has no antecedent basis."**

Answer: These claims have been amended to eliminate the rejection.

**"In claim 49, 'said dielectric' has no antecedent basis."**

Answer: This claim has been amended to eliminate the rejection.

**"In claim 52, it is unclear what a layer of elastomer material' represents. Is it shown in any of the drawings? Furthermore, 'said probes' has no antecedent basis."**

The "elastomer material" is a medium which surrounds the probes. As a result of it being elastomeric in nature, the structure is compliant. The elastomer is depicted in Figures 1 and 2 as element (17). See page 10 of the specification. The specification at page 12, (Figures 5 and 6) describes the elastomer and how it is formed. The language of this claim has been modified to conform to that used in claim 1 to provide an antecedent basis for language used. Support for the language that a "substantial portion of said bond wire elongated electrical conductors" is encompassed within the elastomer is found in the specification at page 5, lines 4-6, and is shown in Figures 1, 2, 5 and 6. Further, an elastomer is found also, e.g., in Figure 7 and is denoted element 17.

**"In claim 53, it is unclear what 'a sheet of polymer material' represents. Is it shown in any drawings? It appears that this sheet is different from 'permitting means' in claim 1."**

The "sheet of polymer material" is an element in the structure which provides the medium for the cantilevered flaps. The polymer is depicted in Figures 1 and 2 as a sheet element (20). See pages 10 and 11 of the specification. The language of this claim has been modified to conform to that used in claim 1 to provide an antecedent basis for language used.

**"In claim 54, it is unclear 'an epoxy material' represents. Is it shown in any drawings? Furthermore, 'said cantilevered flaps' has no antecedent basis."**

The "epoxy material" is described on page 12 of the specification, line 10, as material which applied to the openings in polymer sheet (20) which is then cured and bonded to the cantilevered flaps (23). (See Figures 5 and 6) Thus the first paragraph on page 12 describes the use of the epoxy material and also describes the cantilevered flaps. (See specifically lines 9-11 and Figures noted immediately above.)

**"In claim 55, it is unclear what 'the plurality of probes' represents. Are they shown in any of the drawings?"**

A meaning for a "probe" relevant to this invention is defined as "a pointed metal tip used for making electrical contact with a circuit element being checked." (*Webster's Ninth Collegiate Dictionary* (1983) page 937.) The present invention is directed to structures useful as probes for testing of electrical interconnections to integrated circuit devices and other electronic components. Referring to Figures 1 and 2, for example, the probe (10) comprising the connecting elements 13, 14, 15 and 16 between the test substrate (11) and the integrated circuit device (30). Any of the drawings e.g. Figures 1, 2, 4, 5-7, 10, 12, 14, 15, etc., which depict the connecting elements illustrate the "probes." This description of the term "probe" is consistent with the text in the specification found on page 14, lines 1-7. The drawings cited are relevant as they depict a "plurality" (i.e., more than one) of probes.

**"In claim 56, it is unclear what 'the plurality of collar' and 'the plurality of probe wires' represent. Are they shown in any of the drawings?"**

Referring to Figure 14, there is depicted another embodiment of the test probe (70). The end of the probe (16) is restricted by a collar (25) There are a plurality of collars surrounding each of the probe wires 15. The "plurality of collars" is depicted in Figure 14 as element (25) and the

“plurality of probes” is depicted also in Figure 14 as comprising elements 13, 14, 15 and 16. These drawing is pertinent as it depicts a “plurality” (i.e., more than one) of collars and probes.

**“In claim 57, it is unclear what ‘a sheet of polymer material’ and ‘said plurality of collars’ represent. Are they shown in any of the drawings? Furthermore, ‘said plurality of collars’ has no antecedent basis.”**

The “sheet of polymer material” is an element in the structure of the present invention which provides the medium for the cantilevered flaps. The polymer is depicted in Figures 1 and 2 as a sheet element (20). See pages 10 and 11 of the specification. The language of this claim has been modified to conform to that used in claim 1 to provide an antecedent basis for language used. Referring to Figure 14, there is depicted another embodiment of the test probe (70). The end of the probe (16) is restricted by a collar (25) There are a plurality of collars surrounding each of the probe wires 15.

The “plurality of collars” is depicted in Figure 14 as element (25) and the “plurality of probes” is depicted also in Figure 14 as comprising elements 13, 14, 15 and 16. These drawing is pertinent as it depicts a “plurality” (i.e., more than one) of collars and probes.

**“In claim 58, it is unclear what ‘a plurality of probes array’ represents. Are they shown in any of the drawings?”**

A meaning for a “probe” relevant to this invention is defined as “a pointed metal tip used for making electrical contact with a circuit element being checked.” (*Webster’s Ninth Collegiate Dictionary* (1983) page 937.) The present invention is directed to structures useful as probes for testing of electrical interconnections to integrated circuit devices and other electronic components. Referring to Figures 1 and 2, for example, the probe (10) comprising the connecting elements 13, 14, 15 and 16 between the test substrate (11) and the integrated circuit device (30). Any of the drawings e.g. Figures 1, 2, 4, 5-7, 10, 12, 14, 15, etc., which depict the connecting elements

illustrate the "probes." This description of the term "probe" is consistent with the text in the specification found on page 14, lines 1-7. The drawings cited are relevant as they depict a "plurality" (i.e., more than one) of probes.

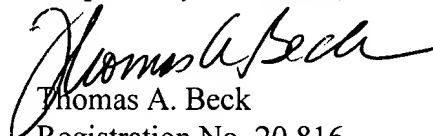
A meaning for "array" relevant to this invention is defined as "a regular or imposing grouping or arrangement...lined up." (Webster's Ninth Collegiate Dictionary (1983) page 104.) The entire text of the written specification and drawings support the use of "array" as it merely means that the electrical interconnections comprising elements 13 - 16 are arranged in the orderly fashion necessary to accomplish the purpose of the invention.

Applicants' attorney has attempted to revise the claims so that they clearly distinguish over the section 112 second paragraph, and the references cited. If the Examiner believes that there are other modifications to be made to the other claims which would result in their allowability, Applicants' attorney would be willing to discuss the matter with the Examiner by telephone at a mutually convenient time.

In view of the arguments and modifications to the claims, allowance of this case is warranted. Such favorable action is respectfully solicited.

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Respectfully Submitted,



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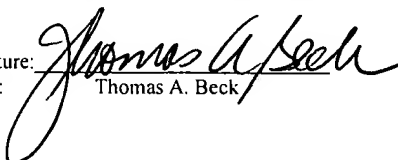
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Thomas A. Beck